

The Colorado State Office is soliciting public comments on the proposed Notice to Lessees (NTL) described below. The comment period will be open through December 4, 2016. Copies of this NTL can be obtained at any BLM office in Colorado or at our website:

http://www.blm.gov/co/st/en/BLM_Programs/oilandgas/leasing_regulations.html. Comments may be electronically submitted at: blm_co_mit_comments@blm.gov

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Notice to Lessees/Operators of Onshore Federal and Indian
Oil and Gas Leases in
Colorado State
Mechanical Integrity Tests
NTL CSO-2016-2

For the purpose of this Notice to Lessees (NTL), a mechanical integrity test of a well is a test to determine if there is a significant leak in the well's casing, tubing, or mechanical isolation device, or if there is significant fluid movement into an underground source of drinking water through vertical channels adjacent to the wellbore. Pursuant to nationwide Bureau of Land Management (BLM) policy, this NTL shall be implemented for onshore Federal leases in Colorado, thereby reducing the potential for future government liability to plug and abandon wells on BLM-supervised lands. This NTL will improve coordination with the Colorado Oil and Gas Conservation Commission MIT guidance, Rule 326.

a. Injection Wells¹ - A mechanical integrity test shall be performed on all injection wells.

- (1) The mechanical integrity test shall include one of the following tests to determine whether significant leaks are present in the casing, tubing, or mechanical isolation device:
 - A. Isolation of the tubing-casing annulus with a packer set at 100 feet or less above the highest open injection zone perforation, unless an alternate isolation distance is approved in writing by the BLM Authorized Officer (AO). The pressure test shall be with liquid or gas at a pressure of not less than 300 psi or the average injection pressure, whichever is greater, and not more than the maximum permitted injection pressure; or
 - B. The monitoring and reporting to the AO, on a monthly basis for 60 consecutive months, of the average casing-tubing annulus pressure, following an initial pressure test; or
 - C. Any equivalent test or combination of tests approved by the AO.
- (2) The mechanical integrity test shall include one of the following tests to determine whether there are significant fluid movements in vertical channels adjacent to the well bore:

¹ Injection Well: A well used for the disposal of produced water or for enhanced recovery operations.

- A. Cementing records which shall only be valid for injection wells in existence prior to July 1, 1986;
- B. Tracer surveys;
- C. Cement bond log or other acceptable cement evaluation log;
- D. Temperature surveys; or
- E. Any other equivalent test or combination of tests approved by the AO.

(3) No person shall inject fluids via a new injection well unless a mechanical integrity test on the well has been performed and supporting documents including Mechanical Integrity Test, Sundry Notice (Form 3160-5), submitted and approved by the BLM AO. Verbal approval may be granted for continuous injection following a successful test.

(4) Following the performance of the initial mechanical integrity test required by subparagraph (3), additional mechanical integrity tests shall be performed on each type of injection well as follows:

- A. Dedicated injection well. As long as it is used for the injection of fluids, mechanical integrity tests shall be performed at the rate of not less than one test every five years, except as specified by subparagraph C below. Five year periods shall commence on the date the initial mechanical integrity test is performed or the date of any mechanical integrity test specified in subparagraph C below.
- B. Simultaneous injection well. No additional tests will be required after the initial mechanical integrity test.
- C. All injection wells. A new mechanical integrity test shall be performed after any casing repairs, after resetting the tubing or mechanical isolation device, or whenever the tubing and/or mechanical isolation device is moved during workover operations.

b. Shut-in Wells² - All shut-in wells shall pass a mechanical integrity test.

- (1) A mechanical integrity test shall be performed on each shut-in well within two years of the initial shut-in date.
- (2) Subsequently, a mechanical integrity test shall be performed on each shut-in well at 5 year intervals from the date the initial mechanical integrity test was performed, as long as the well remains shut-in.
- (3) A mechanical integrity test for a shut-in well shall be performed after isolating the wellbore with a bridge plug or similar approved isolating device set 100 feet or less above the highest open perforation. The pressure test shall be with liquid or gas at an initial, stabilized surface pressure of not less than 300 psi surface pressure or any equivalent test or combination of tests approved by the BLM AO.

c. Temporarily Abandoned Wells³ – All temporarily abandoned wells shall pass a mechanical integrity test.

² Shut-in Well: A well that is physically and mechanically capable of producing oil and/or gas in paying quantities or capable of service use but had no volumes of oil and/or gas produced or fluids injected during the month.

- (1) A mechanical integrity test shall be performed on each temporarily abandoned well within 30 days of temporarily abandoning the well.
- (2) Subsequently, a mechanical integrity test shall be performed on each temporarily abandoned well at five year intervals from the date of the initial mechanical integrity test was performed, as long as the well remains temporarily abandoned.
- (3) A mechanical integrity test for a temporarily abandoned well shall be performed after isolating the wellbore with a bridge plug or similar approved isolating device set 100 feet or less above the highest open perforation. The pressure test shall be liquid or gas at an initial, stabilized surface pressure of not less than 300 psi surface pressure or any equivalent test or combination of tests approved by the BLM AO.

d. Waiting-on-completion and Suspended Operations Wells – A mechanical integrity test shall be performed on each waiting-on-completion well within two years of setting the production casing. A mechanical integrity test shall be performed on each suspended operations well within two years of setting any casing string and suspending operations prior to reaching permitted total depth.

e. Not less than 10 days prior to the performance of any mechanical integrity test required by this rule, any person required to perform the test shall notify the BLM AO with a Sundry Notice (Form 3160-5), of the scheduled date and time when the test will be performed.

f. All wells shall maintain mechanical integrity.

- (1) All non-injection wells which lack mechanical integrity, as determined through a mechanical integrity test or other means, shall be repaired or plugged and abandoned within six months. If an operator has performed a mechanical integrity test within the two years required for shut-in wells or the 30 days required for temporarily abandoned wells by this NTL, they will have six months from the date of the unsuccessful test to make repairs or plug and abandon the well. If the operator has not performed a mechanical integrity test within the required time frames in b.(1) and c.(1), they will not be given an additional six months in the event of an unsuccessful test.
- (2) All injection wells which fail a mechanical integrity test, or which are determined through any other means to lack mechanical integrity, shall be shut-in immediately.

g. Mechanical integrity test pressure loss or gain must not exceed 10% of the initial stabilized surface pressure over a test period of 30 minutes. The test may be repeated if the pressure loss or gain is determined to be the result of compression related to gas dissolution from the fluid column or temperature effects related to the fluid used to load

³ Temporarily Abandoned Well: A well that is physically or mechanically incapable of producing oil and/or gas of sufficient value to exceed direct operating costs but may have value for a future oil/gas completion or as a service completion for enhanced recovery or water disposal. In addition, an idle well is any well that has been non-operational for at least 7 years and has no anticipated beneficial use during the lease term.

the column. Wells that do not satisfy this test requirement are considered to lack mechanical integrity and are subject to the requirements of f. Notice Title: Notice to Lessees/Operators of Onshore Federal and Indian Oil and Gas Leases in Colorado State – Mechanical Integrity Tests
Originating Office: Colorado State Office

SO proofreader:

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